Feed the Future Innovation Lab For Collaborative Research on Nutrition - Africa Makerere University - Annual Report - Year 4

Feed the Future Innovation Lab

For Collaborative Research on Global Nutrition

Annual Report

Makerere University

Year 4 (2013-2014)

Feed the Future Nutrition Innovation Lab-Africa





Management Entity Information

Principal Investigators:

Professor Bernard Bashaasha College of Agricultural and Environmental Sciences Makerere University, Kampala, Uganda Email: bashaasha@caes.maka.ac.ug

Professor Joyce K Kikafunda
College of Agricultural and Environmental Sciences
School of Food Technology and Nutrition
Makerere University, Kampala, Uganda
Email: joycekkikafunda@gmail.com

Other Team Members

Florence Turyashemererwa (PhD) Nassul Kabunga (PhD) Annet Kawuma (Msc) Agaba Edgar (Msc)

Technical and/or Advisory Committee Information

Shibani Ghosh (PhD)
Jeffrey Griffiths (MD, PhD)











Map or List of Countries Where Work Uganda









List of Program Partners¹

Friedman School of Nutrition, Tufts University, Boston, US
Harvard School of Public Health, Boston, US
International Food Policy Research Institute (IFPRI), Washington, DC, US
Gulu University, Gulu, Uganda
Local government administrations
Uganda Chartered HealthNet (UCH), Makerere University, Kampala, Uganda

¹US universities and international partners by country











Acronyms

USAID United States Agency for International Development

FANTA Food and Nutrition Technical Assistance
IFPRI International Food Policy Research Institute

SPRING Strengthening Partnerships, Results, and Innovations in Nutrition Globally

UCH Uganda Chartered HealthNet WFP World Food Programme









Executive Summary

Makerere University, in collaboration with Tufts University and Harvard School of Public Health began the process of implementation of the birth cohort in Year 4. The birth cohort is an evaluation of USAID's Uganda Community Connector Project. During this time, the necessary tools and ethical approvals needed (from Makerere University School of Public Health and the Uganda National Council of Science and Technology) have been obtained. The research protocols and tools have been designed and pretested. Local government administrations of the 12 districts, in the north and southwestern parts of the country, where the birth cohort is to be implemented, have been oriented on the project. Collaborations with various government hospital labs which will process and store blood samples from the cohort, in the north and southwestern cohort implementation districts, have been established. Memorandum of understandings with other partners (IFPRI, UCH, Gulu University) involved in the cohort implementation have also been put in place. In addition to the above, planning meetings to guide the cohort implementation of both the USAID Community Connector project and the USAID mission in Kampala have been conducted.

On the logistical part, procurements for all tools/equipment and supplies needed have been completed, and a full-time office administrator hired.

In addition to the birth cohort, a significant amount of planning, including but not limited to the renewal of the ethical approval, has been done for the panel survey. The panel survey has been planned to begin at the same time as it did it Year 3—October-December 2014.

Capacity building in the form of training of supervisors to implement the cohort was done. Enumerators, for the same cause, have also been identified and plans are underway to train them. One academic staff member from Makerere University staff was supported to attend a short course on epidemiology and nutrition at the Harvard School of Public Health during the summer.

Aside from the above activities, work was done to understand the National Nutrition Policy and programming processes. This work involved formal in-depth discussions with key stakeholders in different government departments which subscribe to the Uganda Nutrition Action Plan. Discussions were also held with key staff from various local, international and UN agencies.

II) Program Activities and Highlights²

All of the required institutional review board approvals for the birth cohort implementation have been obtained. The necessary data-collection tools have been developed, pretested and translated into the local languages of the respective cohort districts. Systems for the cohort implementation, from the sub-county to district levels, have been put in place. A central lab for the processing of blood samples was identified and the memorandum of understandings was shared. Local governments in the cohort implementing districts have

²Summary of program activities for the year, no more than one page in length











been oriented on the birth cohort. Training of the birth cohort supervisors has been done. Data-collection enumerators have been identified.

For the panel survey, a renewal of ethics has been obtained from the necessary review boards.

One academic staff member was sent to Harvard for a short course in Epidemiology and Biostatistics.

To understand the National Nutrition Policy and programming processes, formal, in-depth discussions were held with the key personnel in different government sectors which subscribe to the Uganda Nutrition Action Plan: i.e., Ministries of Health; Agriculture; Education and sports; local government; gender labor and social development; trade and cooperatives and planning. Nongovernmental organizations and UN agencies which participated in this activity included: IFPRI; the USAID mission; USAID SRPING; FANTA; USAID Community Connector; Harvest Plus; UN REACH; and the World Health Organization. Analysis of the results arising from these discussions is being analyzed.

Key Accomplishments³

Specific accomplishments in Year 4 include: the obtaining of institutional approvals for the birth cohort; development and testing of data-collection tools and an electronic datacollection application; training of field supervisors; orientation of 12 district local governments about the birth cohort and setting up institutional collaborations with districtbased laboratories for the cohort blood sample processing and storage. A clear cold chain system has been worked out, starting from the communities to the district labs and finally to Makerere University for storage. Contracting of analytical laboratories in the US and Germany is also in place. A significant amount of work has been done on the planning for the panel survey which is scheduled to begin before this calendar year ends (October-December 2014). Renewed ethical approval has been obtained for the panel survey.

On the capacity-building arm, a team of 19 field supervisors for the birth cohort study were trained on agriculture, nutrition and health linkages and other key areas that are integral to these linkages. These key areas included: water sanitation and hygiene; and infant and young child feeding practices, among others. Data enumerators for the birth cohort have been identified and preparations for their training have been finalized.

From Makerere University, Dr. Agnes Nabubuya completed a summer training session on epidemiology and global nutrition, management and food-borne infections from Harvard School of Public Health.

³Concise statement of achievements, limited to one page in length that focuses on outputs, not process, such as Feed the Future indicators and distillation of program achievements across all program activities. Reporting on numbers of project meetings is not an output.









Finally, information to understand the national nutrition policy and programming processes from different government sectors, nongovernmental organizations and UN agencies in the country was collected.

III) Research Program Overview and Structure

The Year 4 research program is an evaluation of the effectiveness of the integrated livelihood and nutrition interventions to improve maternal and child nutrition and health in rural Uganda. This work is an evaluation of the Uganda USAID Community Connector Project which implements these integrated activities. This evaluation takes on the form of a birth cohort and panel survey. Capacity building on nutrition, agriculture and health linkages is also on the agenda.

IV) Research Project Reports⁴

a) Theme AProject I

The Birth Cohort Study

The Birth Cohort Study looks at the effectiveness of the integrated livelihood and nutrition interventions to improve maternal and child nutrition and health in rural Uganda, activities implemented by the USAID Community Connector project. The study assesses the effect of integration and/or co-location of interventions, aflatoxin exposure and environmental enteropathy and coverage, uptake and adherence to intervention messages and activities and how these impact the maternal and child health and nutritional status. The cohort will be implemented in both USAID Community Connector Intervention and non-intervention districts; this will serve as controls. In place to implement the birth cohort are all the required ethical approvals; orientation of all the district local governments in the North and Southwestern parts of the country where the cohort implementation is to take place; establishment of the cold chain system (Figure 1) and collaborations with various district labs which will be involved in the blood sample processing and storage. The study supervisors have been trained and preparations to have the data enumerators trained are in place.

⁴Summaries of project activities, highlights and outcomes, not scientific reports or long detailed research papers, no more than one page per project.











Figure 1: Cold Chain for the northern districts of the birth cohort implementation

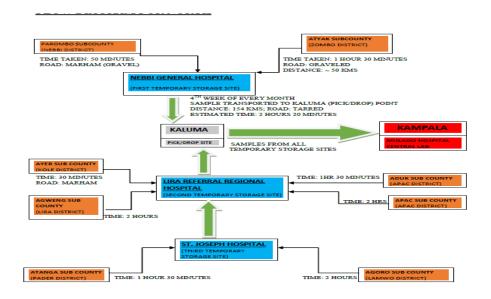
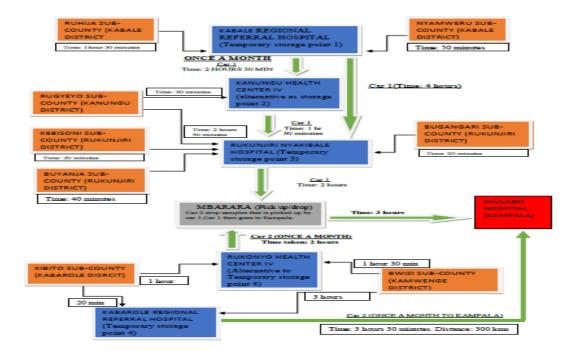


Figure 2: Cold Chain for the Southwestern districts of the birth cohort implementation









Project 2

The Panel Study

The Panel Study aims to evaluate the effectiveness of the USAID Community Connector interventions on household livelihoods. Contrary to the birth cohort, the Panel Survey collects data from a representation of randomly-selected households in only the Community Connector intervention districts. Renewal of the ethical approval to implement this study in addition to other logistical preparations has been made. The study will roll out at the same time the project did last year—in October.

V) Name of Mission and Award Number

USAID Washington, award number AID-OAA-L-10-00006; CFDA number 98.0001

VI) Human and Institutional Capacity Development⁵

a) Training by Country

i) Short-Term

Dr. Agnes Nabubuya from Makerere University attended a summer session in Public Health research studies at the Harvard School of Public Health. Dr. Nabubuya took courses in epidemiology, global nutrition, management and food-borne infections. Dr. Nabubuya's training is important in building a strong foundation for skills in multidisciplinary research in the areas of agriculture, nutrition and health, which she will pass on to her students at Makerere University.

ii) Long –Term

For the Year 4, Makerere University did not have a fresh intake of graduate students. Support was, however, maintained for the five continuing students studying under the disciplines of Nutrition and Agriculture at Makerere University. Of these five, three are male and two are female. The students are expected to complete their Master's degrees this calendar year.

b) Institutional Development

Training on agriculture, nutrition, and health linkages as well as key related areas including but not limited to sanitation, water and hygiene, infant and young child feeding practices, and intrahousehold decision-making on aspects of agriculture, nutrition, and health linkages was given to field supervisors for the birth cohort (eight males and nine females). The intensive one-week training was done jointly by teams from Makerere University, Harvard School of Public Health and Tufts University.

VII) Technology Transfer and Scaling Partnerships

There was no involvement in technology development, transfer, or scaling.

VIII) Governance and Management Entity Activity

Professor Bernard Bashaasha continued to serve in his role as the Principal Investigator at Makerere University. Dr. Florence M. Turyashemererwa serves as the Project Coordinator; Ms. Annet Kawuma as a Research Specialist, while Dr. Nassul Kabunga is a post-doctoral

⁵ This section is to serve as a compilation of all program training activities and not meant to duplicate the Capacity Building section under individual Research Project Reports. It can be in chart format.











fellow. Dr. Shibani Ghosh and Professor Jeffrey Griffiths, based at Tufts University, are the Associate Director and Director, respectively. Dr. Chris Duggan and Wafai Fawzie are counterpart principal investigators based at the Harvard School of Public Heath, while Dr. Ngunaratna Nilupa is a co-investigator.

IX) Other Topics⁶

No issues to report

X) Issues⁷

No issues to report

XI) Future Directions

Makerere University will continue with the birth cohort implementation and panel surveys to evaluate the effectiveness of integrated agriculture, nutrition, and health linkages in Year 5. While the panel survey is bi-annual, the birth cohort is multiyear to allow a detailed investigation of the integrated nature of agriculture, health and nutrition interventions on maternal and child health and nutrition outcomes. Capacity building in the form of short-term and long-term training will also continue.

⁷ Such as financial, management, regulatory











⁶ Such as Regional Centers of Excellence, impact assessment, gender initiatives